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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,167	11/25/2003	Hisatoshi Hirota	032133	4326
38834	7590	05/11/2005	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			NORMAN, MARC E	
			ART UNIT	PAPER NUMBER
			3744	

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/720,167	<b>Applicant(s)</b> HIROTA, HISATOSHI	
	<b>Examiner</b> Marc E. Norman	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 5 April 2005 have been fully considered and are addressed below.

First, Applicant argues that it was improper to combine the check valve of Murata et al. with the system of Ruff et al. The Examiner respectfully disagrees. Compressor backflow check valves are common and widely used in the art. It would be obvious to combine this structure in to refrigeration cycle of Ruff et al. for the purpose of preventing compressor backflow, regardless of the other features of the Ruff et al. system.

Next, Applicant argues, with regard to claim 3, that "the automotive air conditioner" is found in the body of the claim, and thus breathes life and meaning into the claim. The Examiner accepts this argument. Accordingly, the rejection under 35 USC 102 is withdrawn. However, the Examiner maintains that it would have nevertheless to apply the teachings of Ruff et al. to an automotive system. Accordingly, a new obvious type rejection of claim 3 is now made below.

Regarding claim 4, Applicant argues that Ruff et al. fails to teach a check valve. The Examiner accepts this argument. Accordingly, the rejection under 35 USC 102 is withdrawn. However, Such a check valve would have been obvious for the same reasons discussed regarding claim 1. Accordingly, a new obvious type rejection of claim 4 is now made below.

Since these new rejections were not necessitated by Applicant's amendments, this Action is made Non-Final.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruff et al.

As per claim 3, Ruff et al. teaches all features of the claim, as previously discussed, except the refrigeration cycle being directed to an automotive air conditioning system. However, the basic function of Ruff et al. (to prevent overloading at restart) is generally applicable to all refrigeration cycles, and would have been obvious to an automotive application in order to prevent overloading at restart. The fact that Applicant's invention is directed to a different purpose is immaterial, since Ruff et al. teaches all of the basic method features.

Claims 1, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruff et al. in view of Murata et al.

As per claims 1 and 4, Ruff et al. teaches all features of the claim as previously discussed, except the check valve. Again, Murata et al. teaches a refrigeration cycle with a check valve

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situated between the evaporator and the compressor. Again, such compressor backflow check valves are common and widely used in the art. It would be obvious to combine this structure in to refrigeration cycle of Ruff et al. for common the purpose of preventing compressor backflow, regardless of the other features of the Ruff et al. system. Also again, the fact that Applicant's invention is directed to a different purpose is immaterial, since the combination of Ruff et al. teaches all of the basic apparatus/method features.

As per claim 5, no new arguments were presented regarding this claim. Accordingly the rejection set in the previous Office Action is carried forward and maintained, in view of the discussions above of the pertinent base claims.

#### ***Allowable Subject Matter***

Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**MARC NORMAN**  
**PRIMARY EXAMINER**